Girls and Horses: A Sex Difference in Attachments
P. H. Klopfer, M. S. Klopfer, and J. Etemad 1

Observations on Saprolegniaceous Fungi That Grow Actively on Plant Detritus Submerged in Freshwater
David E. Padgett and W. P. Heitman 9

Some Effects of Crude Oil on a *Juncus* Tidal Marsh
Armando A. de la Cruz, Courtney T. Hackney, and Bettaiya Rajanna 14

Atlas of Foliar Surface Features in Woody Plants. III. *Hydrangea* (Saxifragaceae) of the United States
James W. Hardin and Ronald E. Pilatowski 29

Three *Turbonilla* (Pyramidellida, Gastropoda) of North Carolina, with Comments on Pyramidellid Systematics
Eric N. Powell 37

Mycorrhizae of 11-year-old *Pinus taeda* L. Plantations in North Carolina
J. A. Menge and L. F. Grand 55

Editor's Note about *Festschrift* in honor of Dr. Lindsay S. Olive
Martha G. Jenner 68

Preface to *Festschrift*
Michael J. Dykstra 69

A Biographical Sketch of Lindsay Olive, with Occasional Personal Reminiscences
Ronald H. Petersen 70

Publications of Lindsay S. Olive, 1941-1980
William R. Burk, Carmen Stoianovitch, Joy Mermin, and Ian Ewing 77

A Transmission and Scanning Electron Microscopic Study of Division and Protoplast Formation in *Cosmarium turpinii*
Martha D. Berliner 84

The Spore Hilum of *Acrasis rosea*
Richard L. Blanton 95

Myxomycete Genetics, 1960-1981
O'Neil Ray Collins 101

Some Recent Observations on the Relationships between Homothallic and Heterothallic Species of *Neurospora*
S. K. Dutta, LaFayette Frederick, and W. Lena Austin 126

Further Studies on Heterokaryon Compatibility in *Ceratocystis radicola*
Arif S. El-Ani 136

Some Observations on Sporulation in the Myxomycete *Stemonitis flavogenita*
Edward F. Haskins 139

Growth of a *Saccharomyces cerevisiae spe10*, a Polyamine Auxotroph; Stimulation by Choline and Carnitine
Seymour H. Hutner, Jason H. Karlawish, Steven B. Werfel, Cyrus J. Bacchi, and Herman Baker 145

Observations of DNA-like Fibers in Mitochondria of Acrasid Cellular Slime Molds
Tsuneyoshi Kuroiwa 152

The Natural Regulation of Midge Populations by Aquatic Fungi in Virginia
W. Wallace Martin 162

Structure of the Interface between the Haustorium of *Caulochytrium protosteloides* and the Hyphal Cytoplasm of *Cladosporium cladosporioides*
Martha J. Powell 171

Phylogenetic Significance of the Flagellar Apparatus of *Ceratiomyxa fruticulosa*
Frederick W. Spiegel 183

Age and Growth of Trout from Two Lightly Fished North Carolina Streams
Patrick J. Coulston and O. Eugene Maughan 191

Reproduction of Raccoons in North Carolina
Samuel I. Zeveloff and Phillip D. Doerr 194

Observations on the Spawning Habits of the Yellowfin Shiner, *Notropis lutipinnis*
Joseph R. McAuliffe and David H. Bennett 200

Notes on North Carolina Boletes. IV. New Species and Distributions of *Suillus*
L. F. Grand 204

Breeding Habitat Association of Spotted Salamanders (*Ambystoma maculatum*) in Western Maryland
J. Edward Gates and Edward L. Thompson 209

A New Size Record for the Common White Shrimp, *Penaeus setiferus*
J. David Whitaker and Richard Shealy 217

Anacamptodes pergracilis, a Hardly Known Defoliator of Baldcypress
A. T. Drooz, W. Carothers, and J. H. Ghent 218

Proceedings and Abstracts from the Seventy-eighth Annual Meeting of the North Carolina Academy of Science, Inc., April 3-4, 1981, at the University of North Carolina, Charlotte, NC 219

Index to Authors of Abstracts of Papers Presented in Senior Academy Paper Sessions 274

Abstracts of Papers Presented at the Meeting of the Collegiate Academy of the North Carolina Academy of Science, Inc., April 10-12, 1980, at East Carolina University, Greenville, NC 276